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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/040,605	12/28/2001	David Harriman	42390.P13764	2731

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EXAMINER	
CHOUDHURY, AZIZUL Q	

ART UNIT	PAPER NUMBER
2145	

DATE MAILED: 06/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/040,605	HARRIMAN ET AL.	
	Examiner	Art Unit	
	Azizul Choudhury	2145	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 April 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,5,6,10,11,15,16,19,23,25,26,28-34 and 36-38* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,5,6,10,11,15,16,19,23,25,26,28-34 and 36-38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *28 December 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *2/15/06 & 2/21/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Detailed Action

This office action is in response to the correspondence received on April 3, 2006.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 5-6, 10-11, 15-16, 19, 23, 25-26, 28-34 and 36-38 are rejected under 35 U.S.C. 102(b) as being anticipated by Clark et al (US Pat No: 5,187,780), hereafter referred to as Clark.

1. With regards to claims 1, 6, and 11, Clark teaches an apparatus, comprising: a data path output unit to output a packet header for a transaction layer packet, the packet header including: a format field to partially specify the packet header format, to specify whether the transaction layer packet includes a data payload and to specify a size of the packet header; and a type field to specify a transaction type, the transaction type to include at least one selected from the following group of: a memory request, an input/output request, a configuration request and a message request, wherein the format field and the type field together specify the packet header format (Clark teaches a design featuring message packets for inter computer communication. The packet feature a type

or a command field (column 4, lines 65-67, Clark) followed by a length field (column 5, lines 1-3, Clark). The type/command field specifies the type of message contained within the packet and the length field specifies the payload/size information of the packet).

2. With regards to claims 5, 10 and 16, Clark teaches the apparatus, wherein the format field and the type field are located in the first byte of the packet header to be output by the data path output unit (The packet feature a type or a command field (column 4, lines 65-67, Clark) followed by a length field (column 5, lines 1-3, Clark)).

3. With regards to claim 15, Clark teaches the system wherein the transmitting device and the receiving device are coupled via a serial interface (The design allows for serial transmission means (column 4, lines 23-25, Clark)).

4. With regards to claim 19, Clark teaches an apparatus comprising: a data path output unit to output a packet header for a transaction layer packet, wherein the packet header includes: a format field to partially specify the packet header format, to specify whether the transaction layer packet includes a data payload and to specify a size of the packet header; and a type field to specify a transaction type, the transaction type to include at least one selected from the following group of: a memory request, an input/output request, a configuration

request and a message request, wherein the format field and the type field are located in the first byte of the packet header and together specify the packet header format, the format field also indicates the size of the packet header and whether the packet includes a data payload that is four-bytes, naturally aligned and limed in size by a maximum data payload value (Clark teaches a design featuring message packets for inter computer communication. The packet feature a type or a command field (column 4, lines 65-67, Clark) followed by a length field (column 5, lines 1-3, Clark). The type/command field specifies the type of message contained within the packet and the length field specifies the payload/size information of the packet).

5. With regards to claims 23, 26 and 34, Clark teaches the apparatus wherein the format field to specify the size of the packet header comprises the size of the packet header based on a 32-bit addressing format (Clark teaches a design featuring message packets for inter computer communication. The packet feature a type or a command field (column 4, lines 65-67, Clark) followed by a length field (column 5, lines 1-3, Clark). The length field specifies the payload/size information of the packet. Plus, Clark's design allows for 32-bit addressing (column 4, lines 56-57, Clark)).

6. With regards to claims 25, 28 and 36, Clark teaches the apparatus wherein the format field to specify the size of the packet header comprises the size of the

packet header based on a 64-bit addressing format (Clark's design allows for 64-bit addressing (column 4, lines 15-16, Clark)).

7. With regards to claims 29 and 37, Clark teaches the apparatus wherein the packet header comprises the packet header including a length field, the length field to specify the length of payload data (Clark teaches a design featuring message packets for inter computer communication. The packet feature a type or a command field (column 4, lines 65-67, Clark) followed by a length field (column 5, lines 1-3, Clark). The length field specifies the payload/size information of the packet).

8. With regards to claim 30, Clark teaches the packet header further including a length field, wherein if the type field specifies the transaction type as a message and the message specifies a data length, the length field specifies the data length (Clark teaches a design featuring message packets for inter computer communication. The packet feature a type or a command field (column 4, lines 65-67, Clark) followed by a length field (column 5, lines 1-3, Clark). The type/command field specifies the type of message contained within the packet and the length field specifies the payload/size information of the message).

9. With regards to claim 31, Clark teaches the apparatus wherein the transaction type to include the memory request comprises the memory request to include a

memory write request (Clark teaches a design featuring message packets for inter computer communication. The packet feature a type or a command field (column 4, lines 65-67, Clark) followed by a length field (column 5, lines 1-3, Clark). Memory request means are present within Clark's design as well (column 11, lines 10-17, Clark)).

10. With regards to claim 32, Clark teaches the packet header further including a byte enable field to specify which bytes at a beginning portion of a data payload for the transaction layer packet are enabled, the beginning portion to include a first 4 bytes of data in the payload data, wherein the byte enable field include 4 bits, each bit to correspond to a given byte in the first 4 bytes of data, a value of 1 in each bit to specify that a corresponding given byte is enabled, enabled to include an indication to a logical device addressed by the packet header to write the corresponding given byte to a memory (Clark teaches a design featuring message packets for inter computer communication. The packet feature a type or a command field (column 4, lines 65-67, Clark) followed by a length field (column 5, lines 1-3, Clark). Memory request means are present within Clark's design as well (column 11, lines 10-17, Clark)).

11. With regards to claim 33, Clark teaches the packet header further including another byte enable field to specify which bytes at an ending portion of a data payload for the transaction layer packet are enabled, the ending portion to

include a last 4 bytes of data in the payload data, wherein the byte enable field includes 4 bits, each bit to correspond to a given byte in the last 4 bytes of data, a value of 1 in each bit to specify that a corresponding given byte is enabled (Clark teaches a design featuring message packets for inter computer communication. The packet feature a type or a command field (column 4, lines 65-67, Clark) followed by a length field (column 5, lines 1-3, Clark). The type/command field specifies the type of message contained within the packet and the length field specifies the payload/size information of the packet).

12. With regards to claim 38, Clark teaches the apparatus wherein the data path input unit is to compare the length specified in the length field to an actual length of the payload data and to treat the transaction layer packet as a malformed transaction layer packet based on the actual length not matching the length specified in the length field (Checks are performed on the length versus the length field information to detect errors (column 13, lines 50-51, Clark)).

Response to Remarks

The amendment received on April 3, 2006 has been examined but is not deemed fully persuasive. In lieu of the claim amendments, the 112-type rejection has been withdrawn. The following are the examiner's response to the remarks submitted in the applicant's amendment.

The applicant contends that their claimed invention features a format field that specifies a size of the packet header. The applicant cites column 12, lines 37-39 of the Clark prior art as proving that the header contents never change within the prior art. The examiner disagrees with this assertion. Column 5, lines 1-21 clearly indicates that the size of the address fields within the header can vary, hence the size of the header can vary. Furthermore, column 5, lines 1-21 also indicates that when the packet is an acknowledgement packet, certain fields are not present. So, when the packet is an acknowledgment packet, it is known by the system that the acknowledgement packet header is of a different size. This further proves that the header of the packets used within Clark's design are variable and not fixed. Finally, since the packet headers are clearly variable, means inherently must be present by which to allow the system to recognize packet header size. Otherwise, the packet headers cannot be read properly.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Azizul Choudhury whose telephone number is (571) 272-3909. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on (571) 272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AC

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